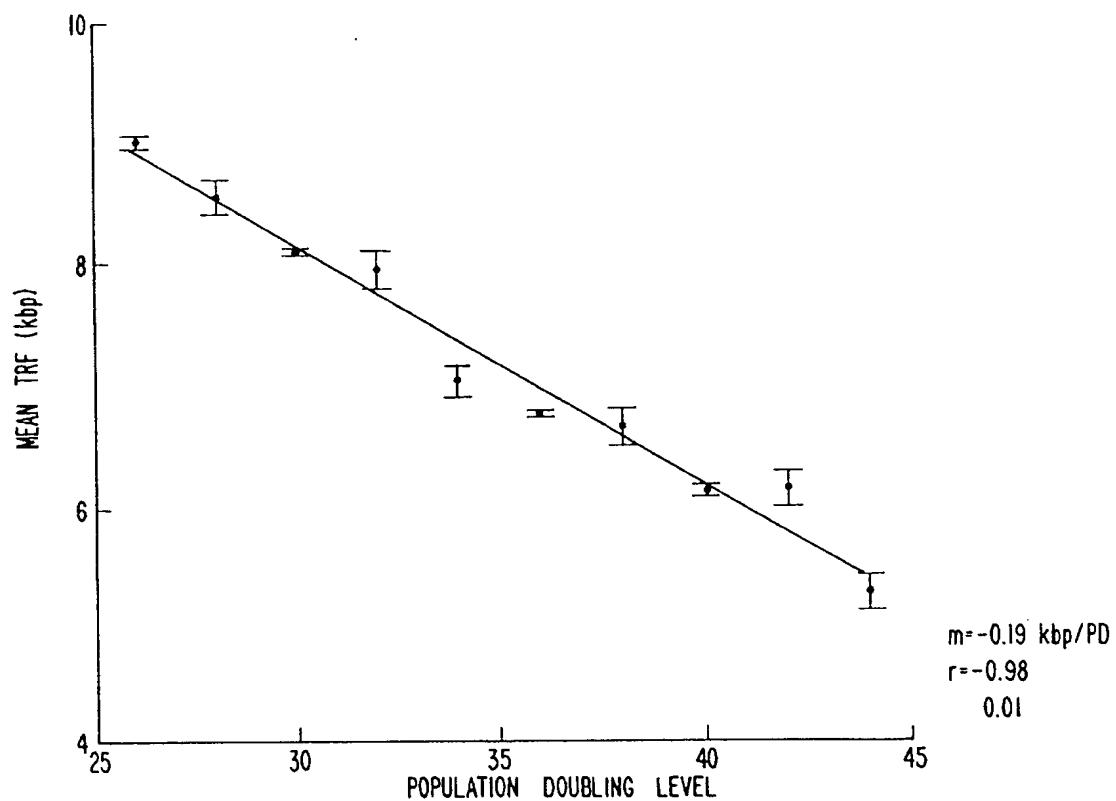
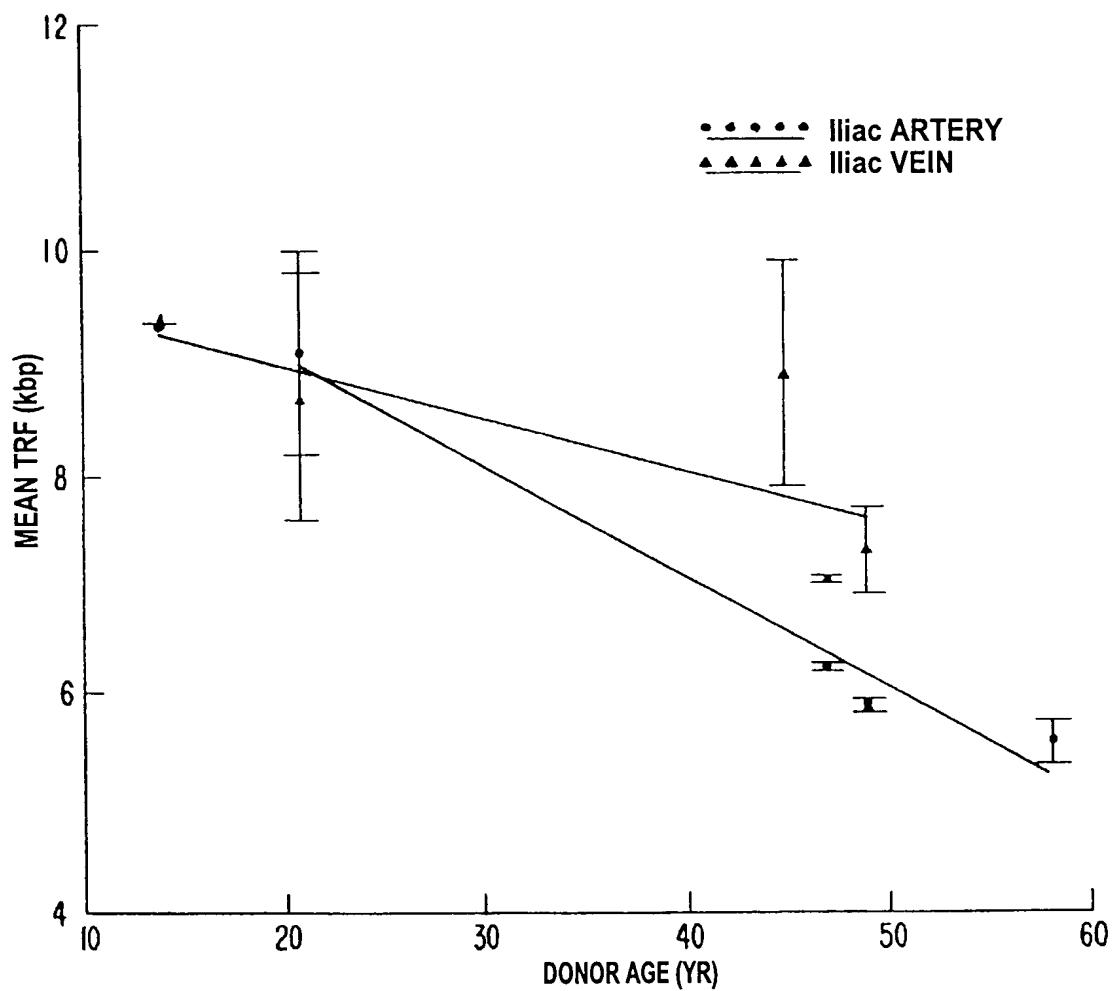


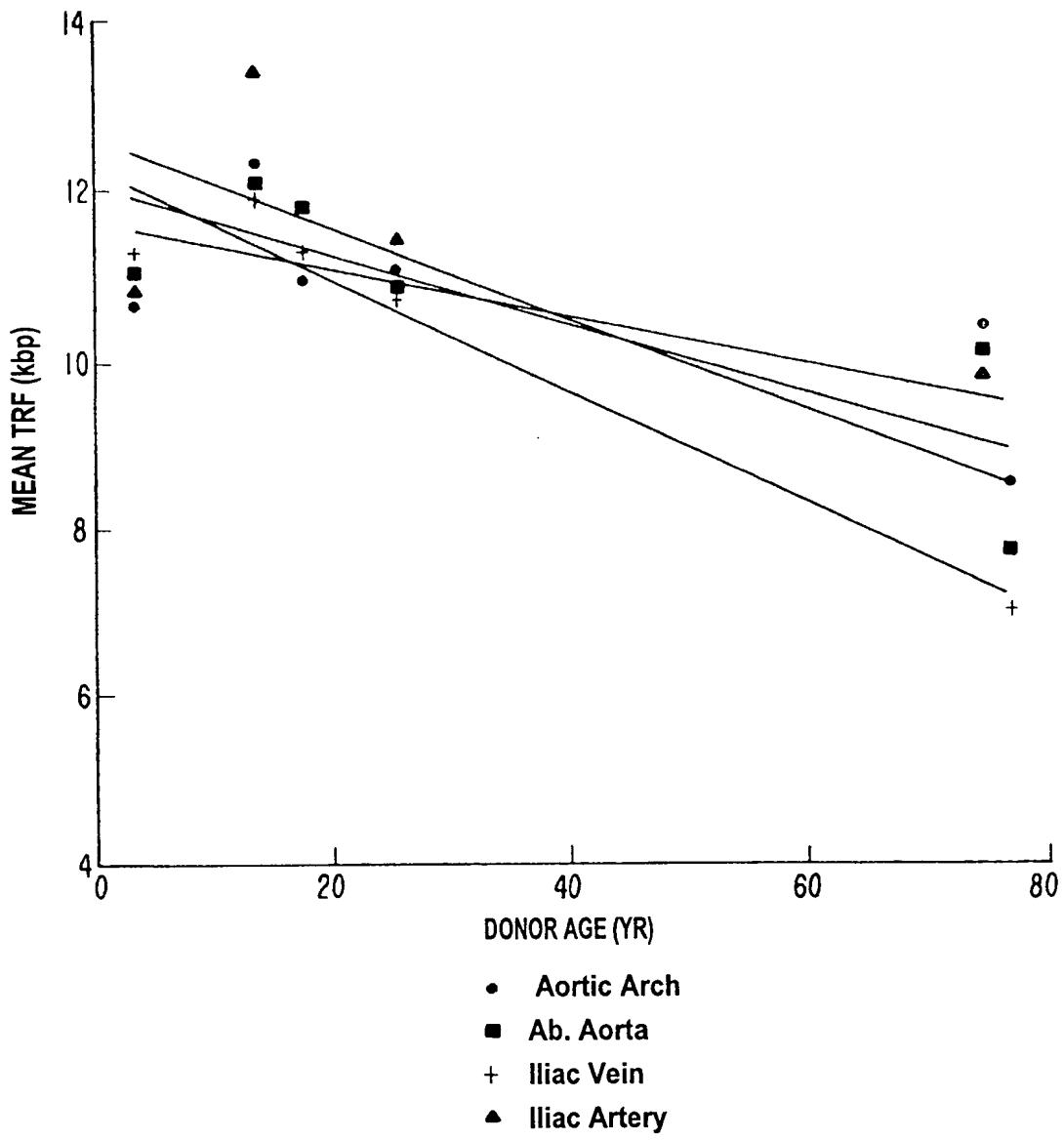
**Fig. 3**



**Fig. 4**

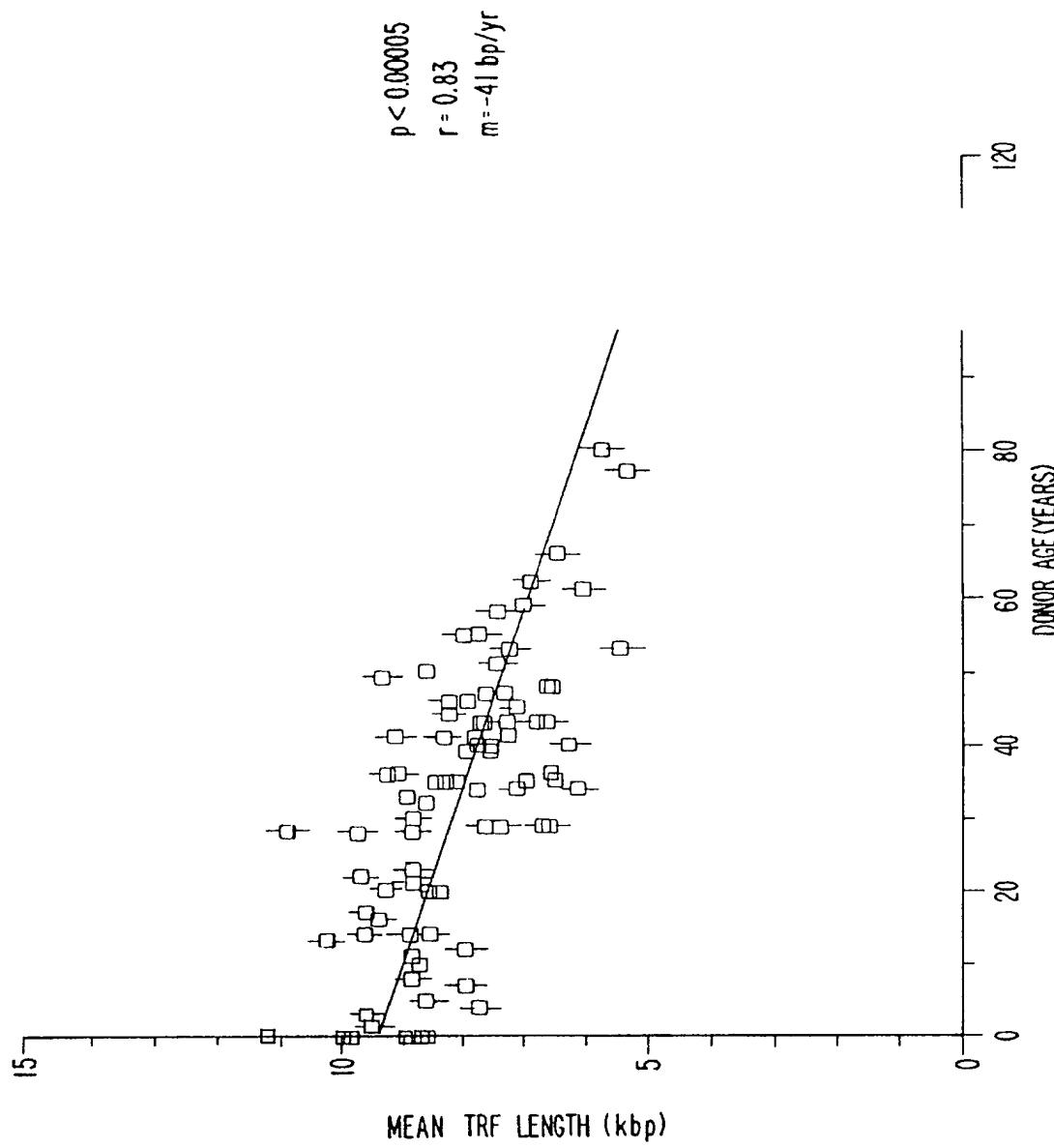


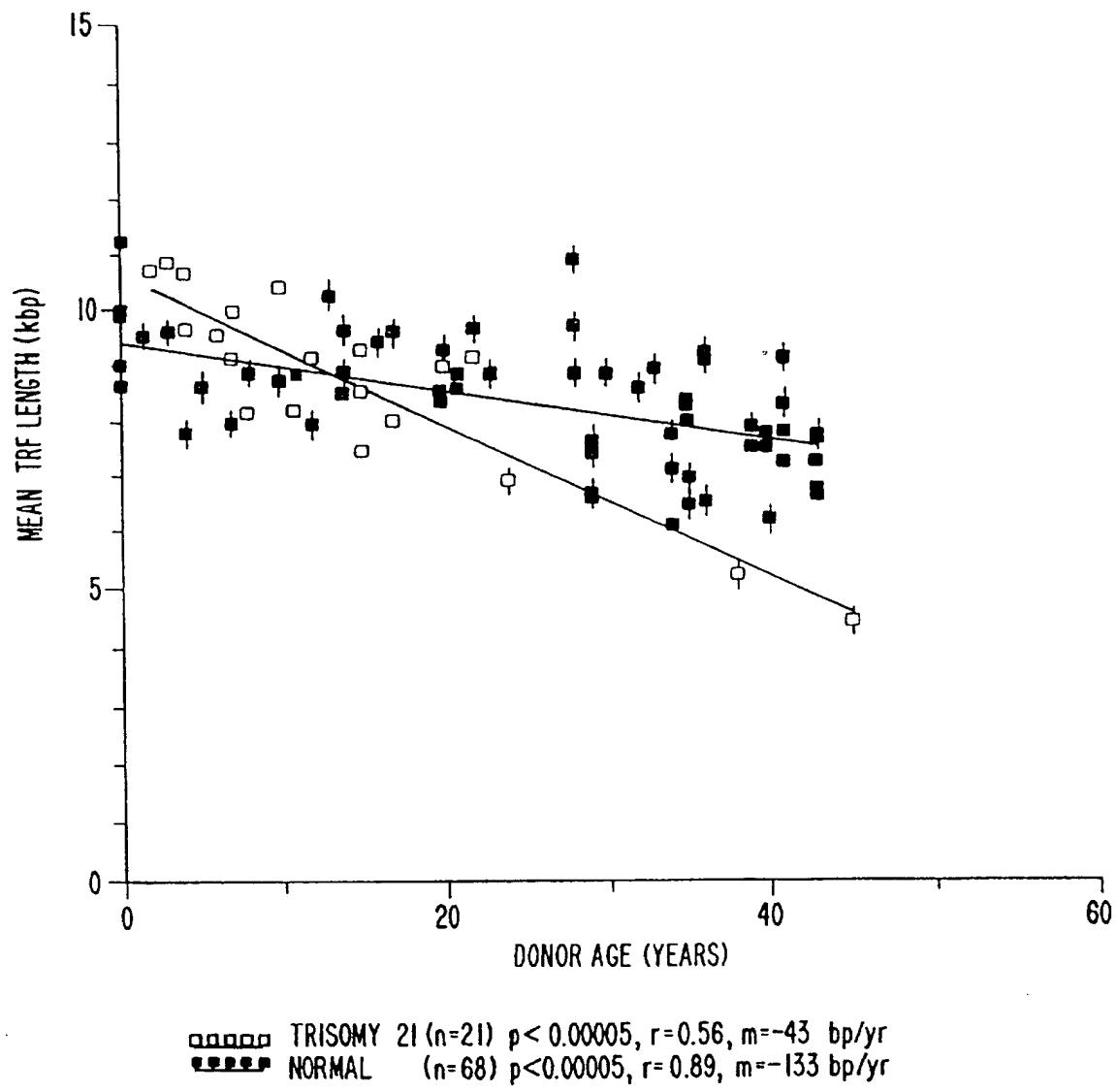
**Fig. 5**



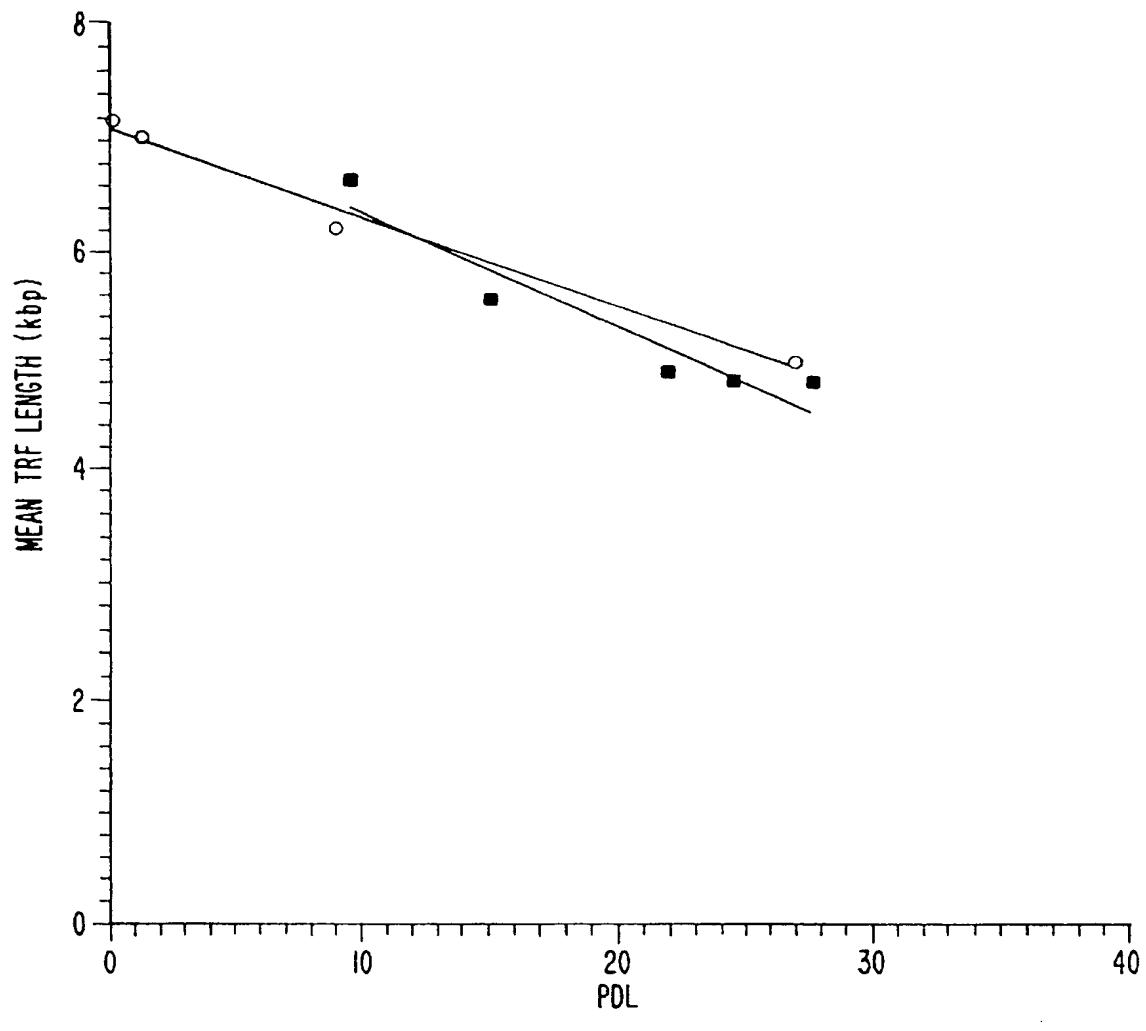
**Fig. 6**

**Fig. 7**



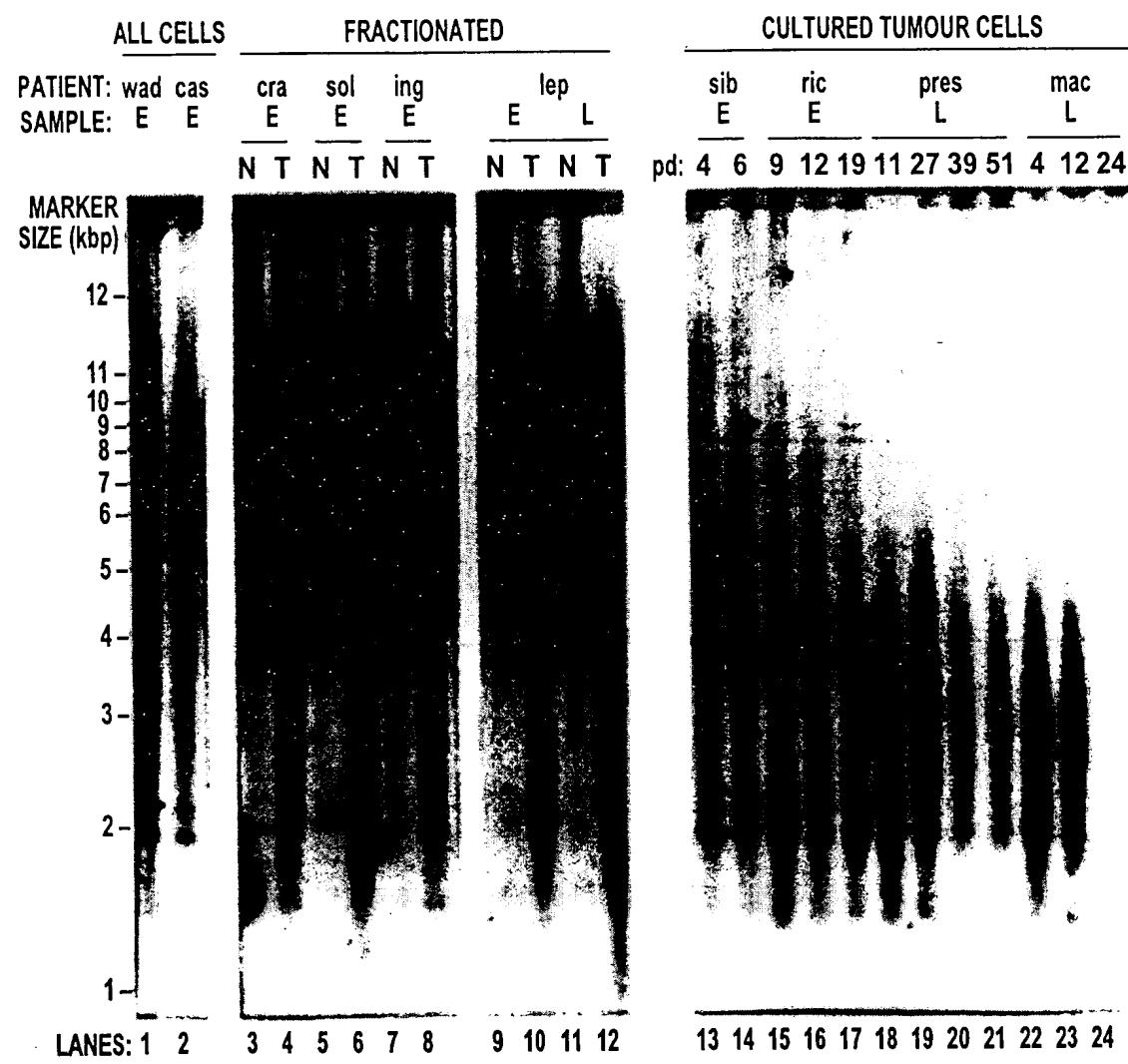


**Fig. 8**

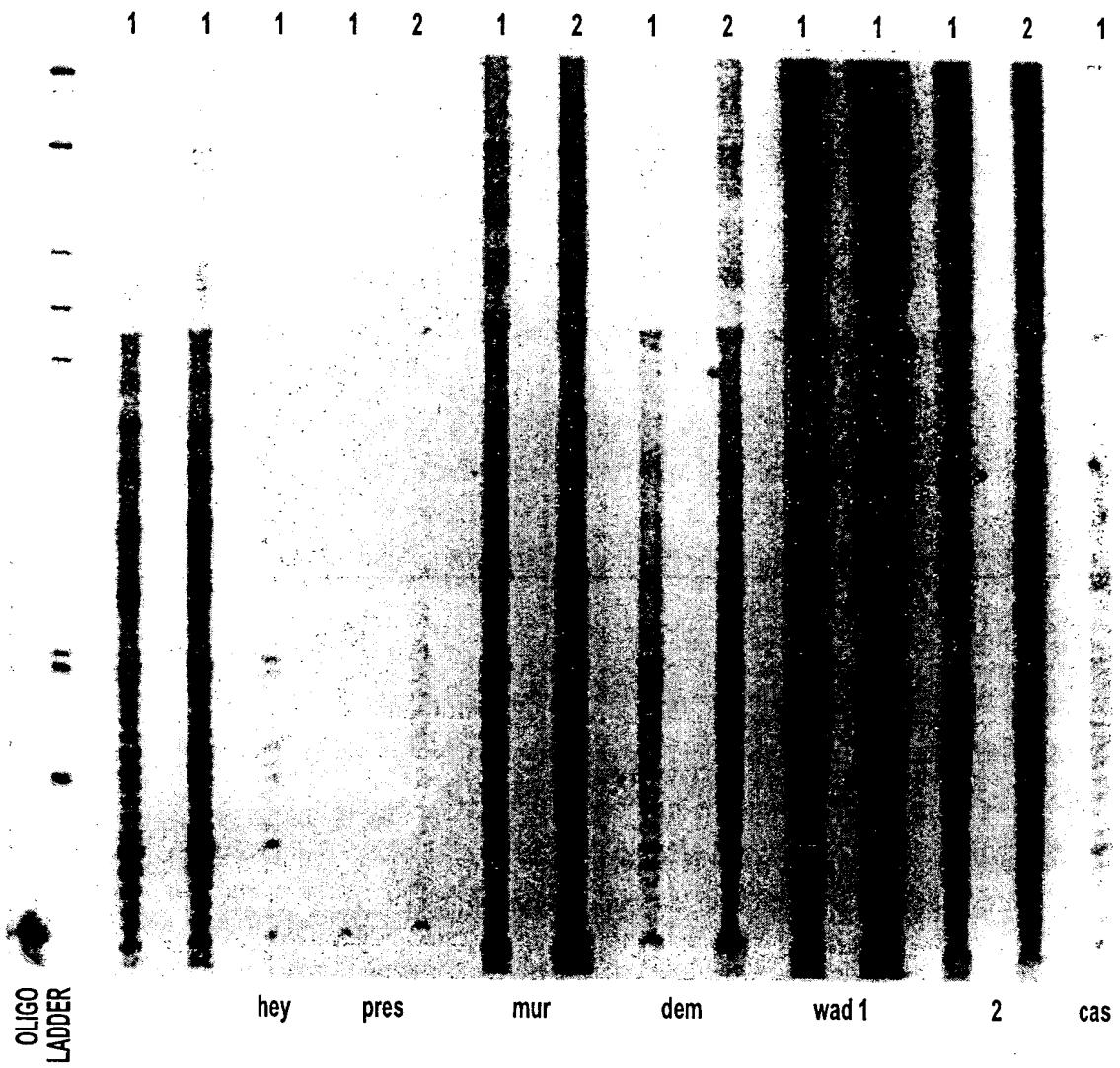


□□□□ RATE OF LOSS: 102 bp/PD  
○○○○ RATE OF LOSS: 79 bp/PD  
~~~~ ONLY ONE DATA POINT (AT SENESCENCE) WAS AVAILABLE

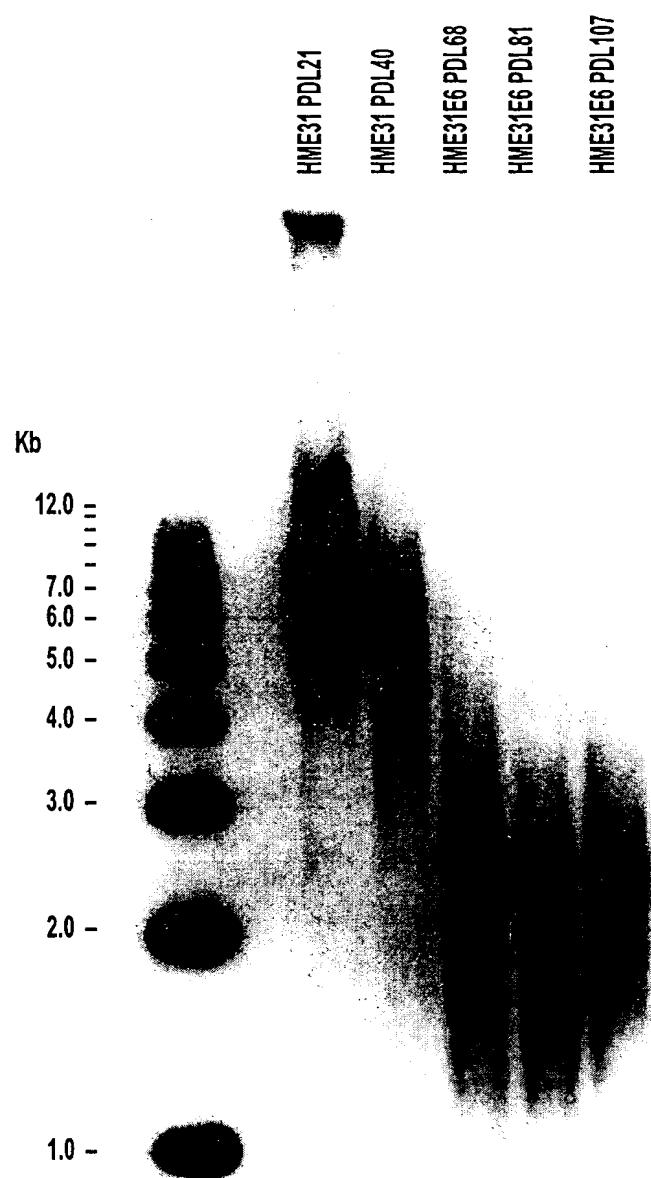
**Fig. 9**



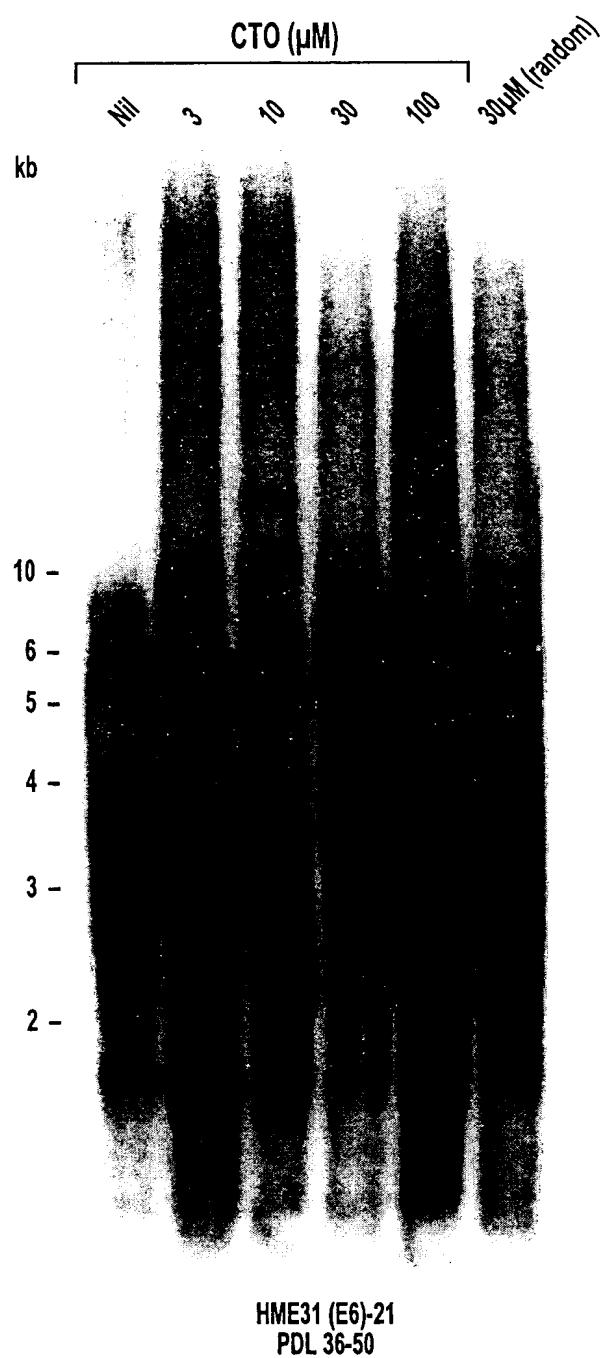
**Fig. 10**



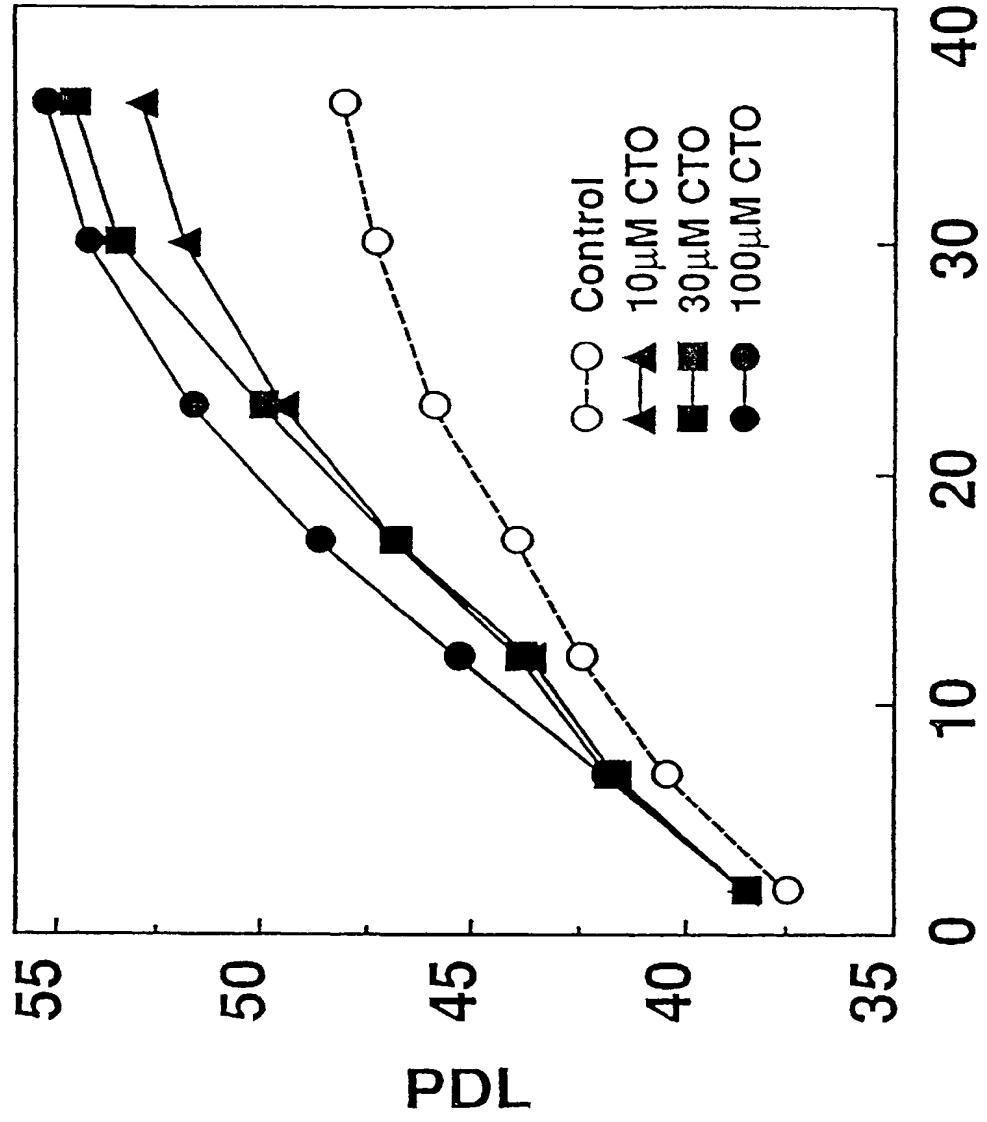
**Fig. 11**



**Fig. 12**

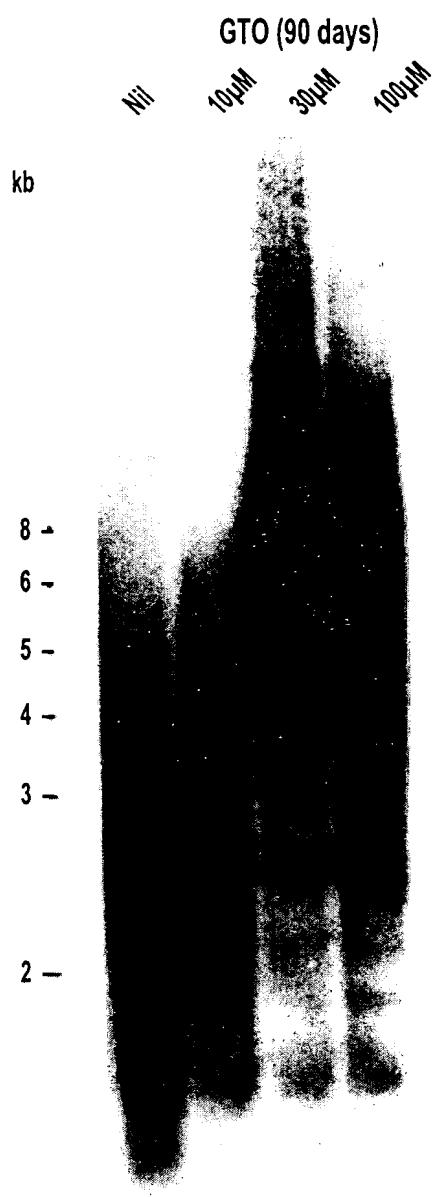


**Fig. 13**



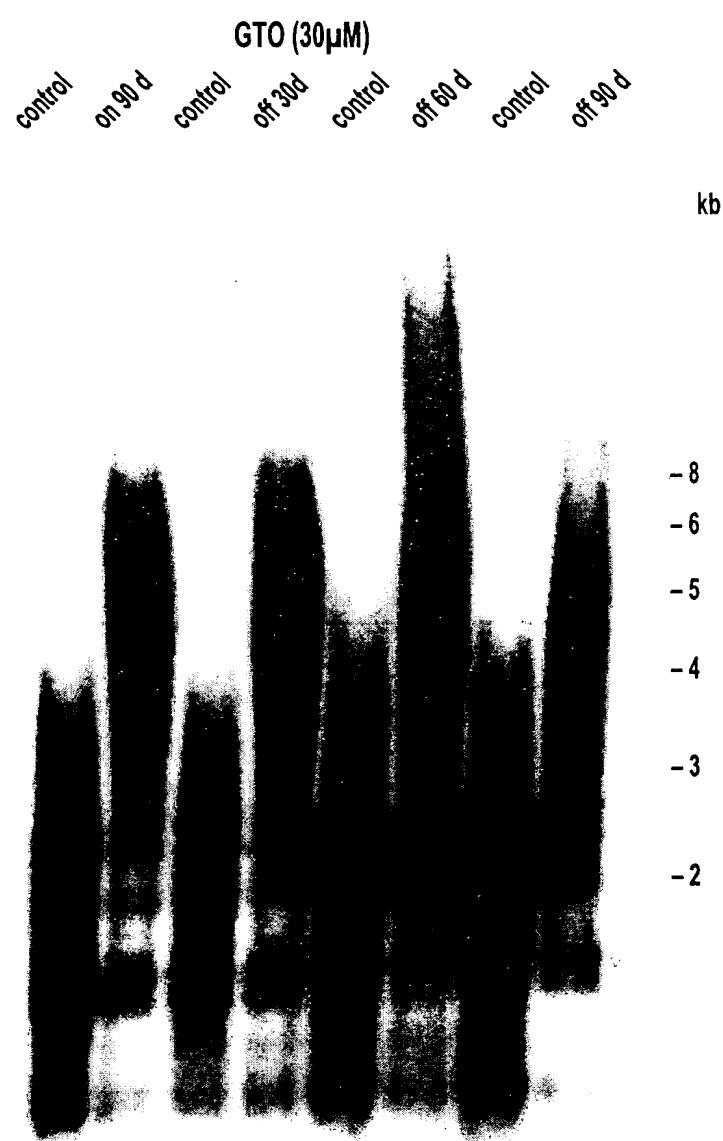
Days in Culture with CTO

Fig. 14



IDH4 cells

**Fig. 15**



IDH4 cells

**Fig. 16**

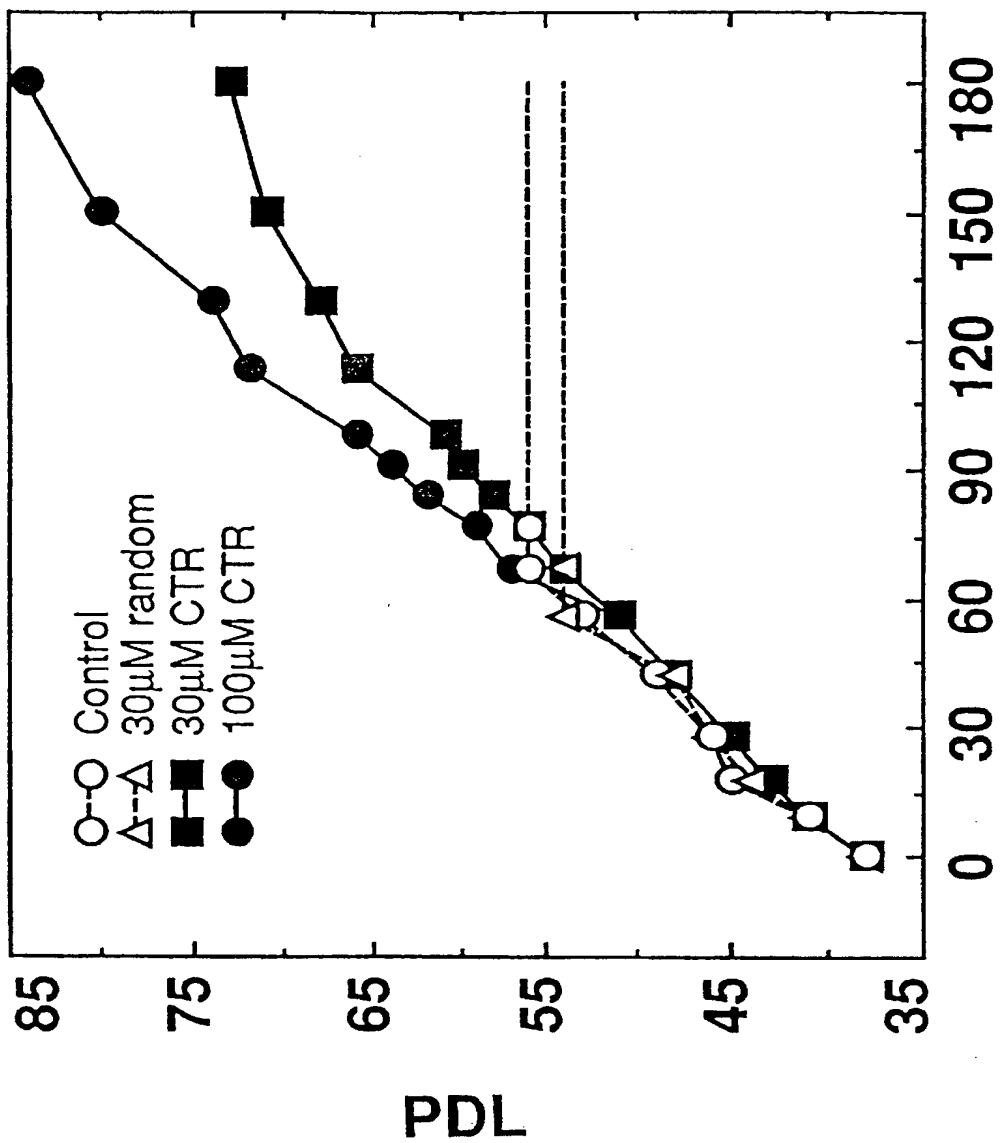
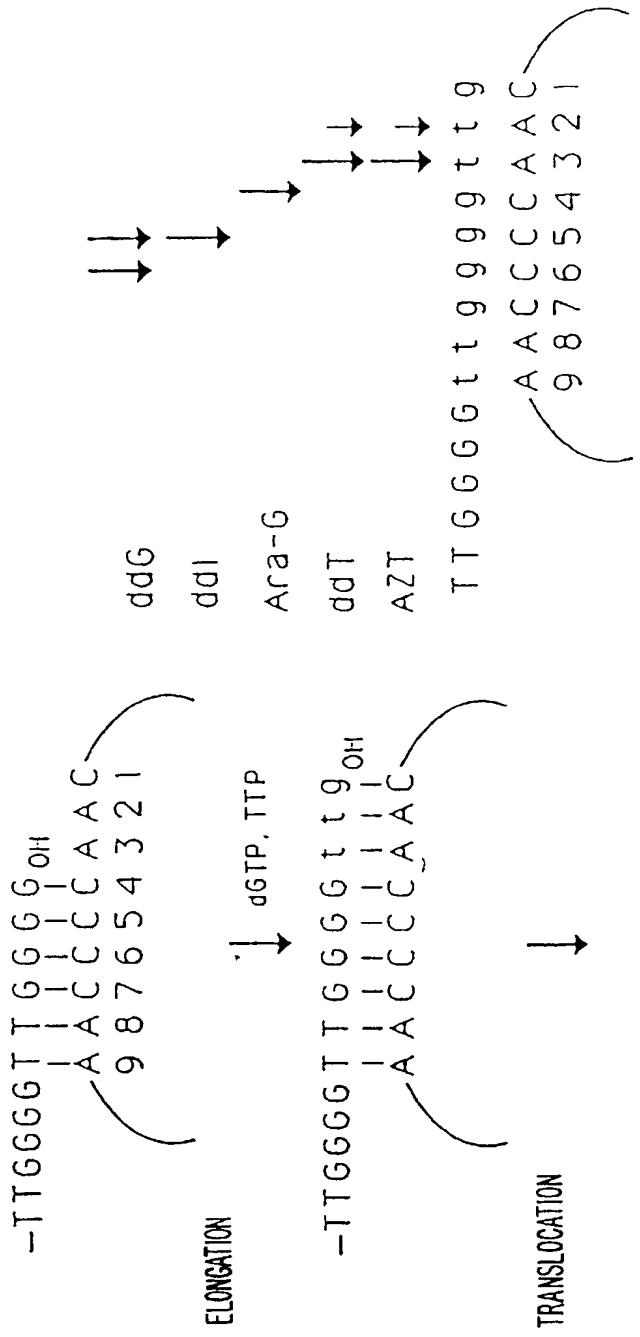


Fig. 17  
Days in Culture

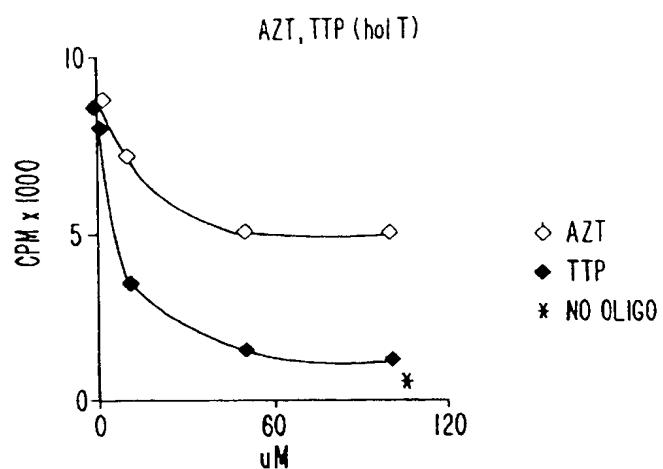


**Fig. 18B**

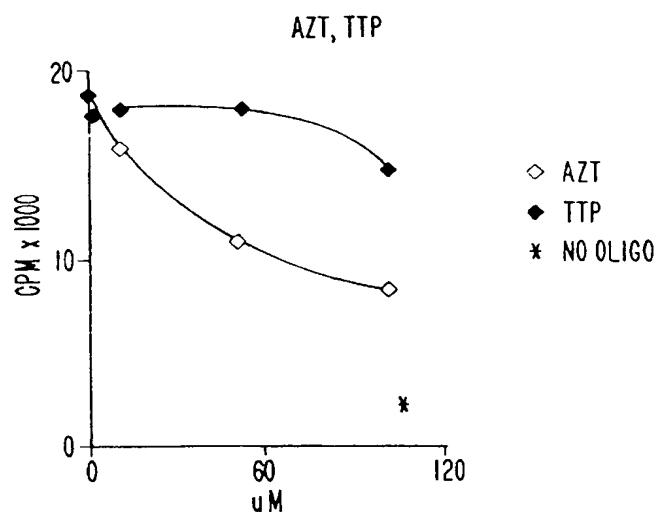


**Fig. 18A**

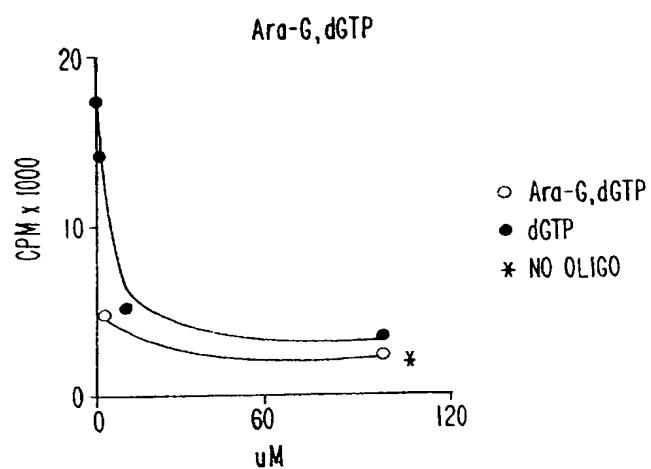
**Fig. 19A**



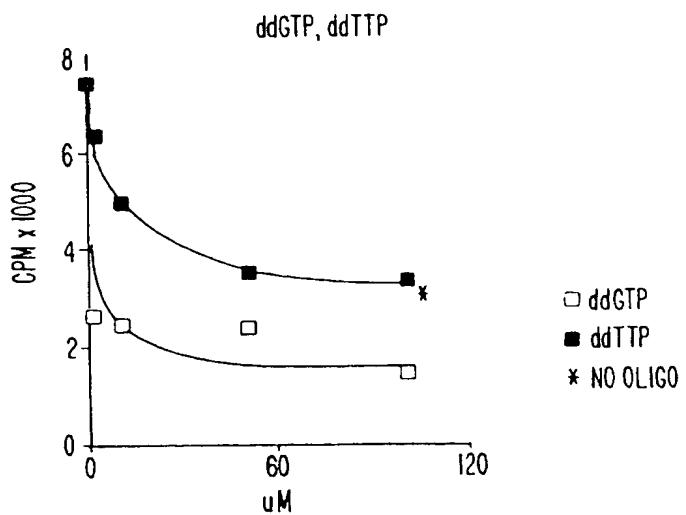
**Fig. 19B**



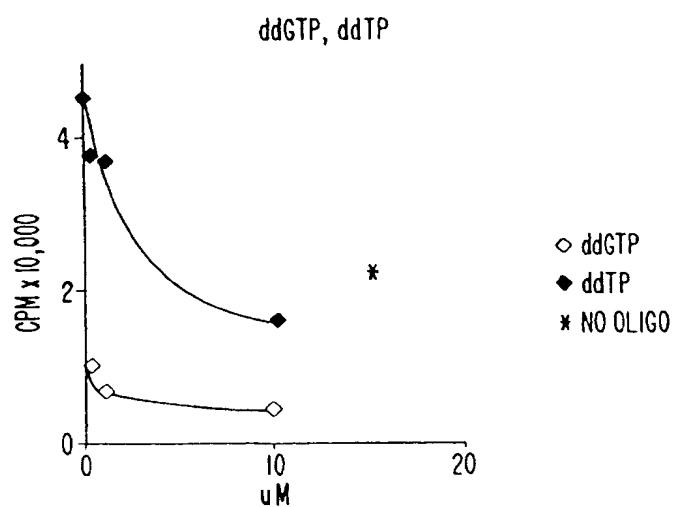
**Fig. 19C**



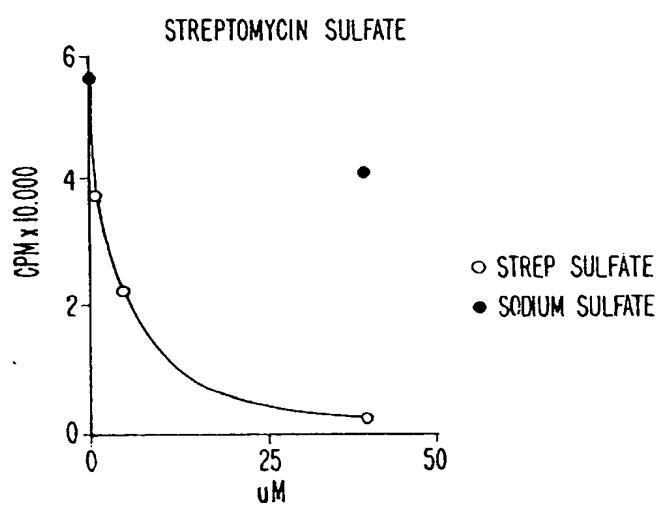
**Fig. 19D**



**Fig. 19E**



**Fig. 19F**



| <sup>32</sup> P label | dGTP  | TPP      | dGTP    |
|-----------------------|-------|----------|---------|
| competitor            | AZT   | cold TTP | Ara-G   |
| μM                    | 0 100 | 0 1 10   | no pri. |

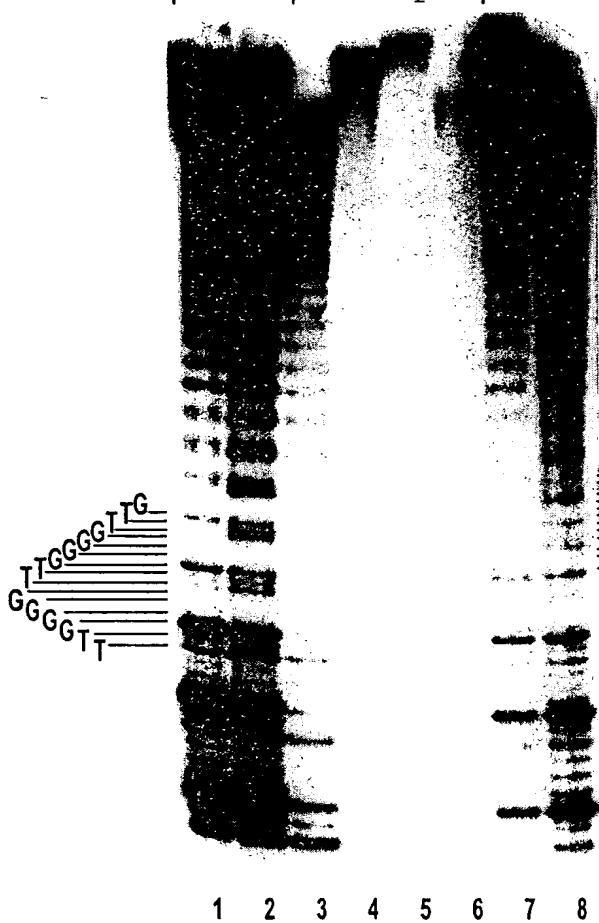


Fig. 20A



Fig. 20B

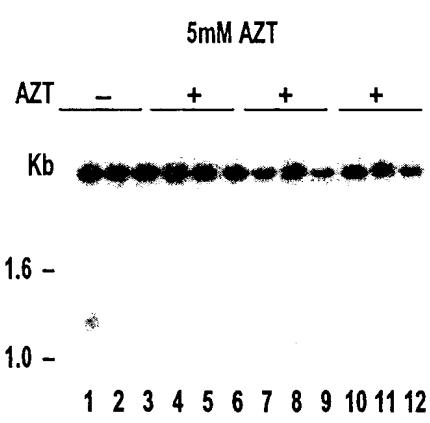


Fig. 21A

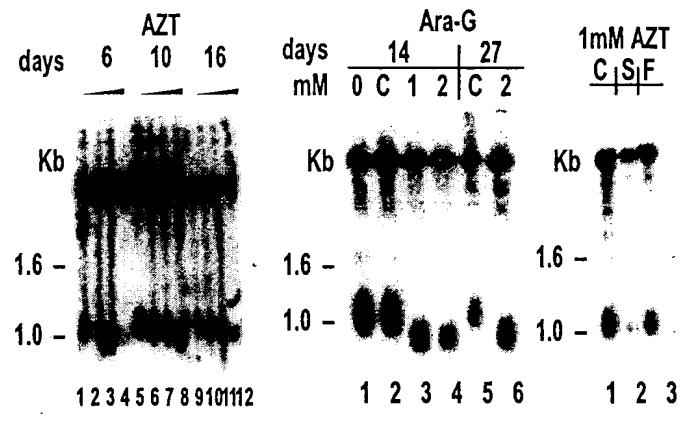


Fig. 21B

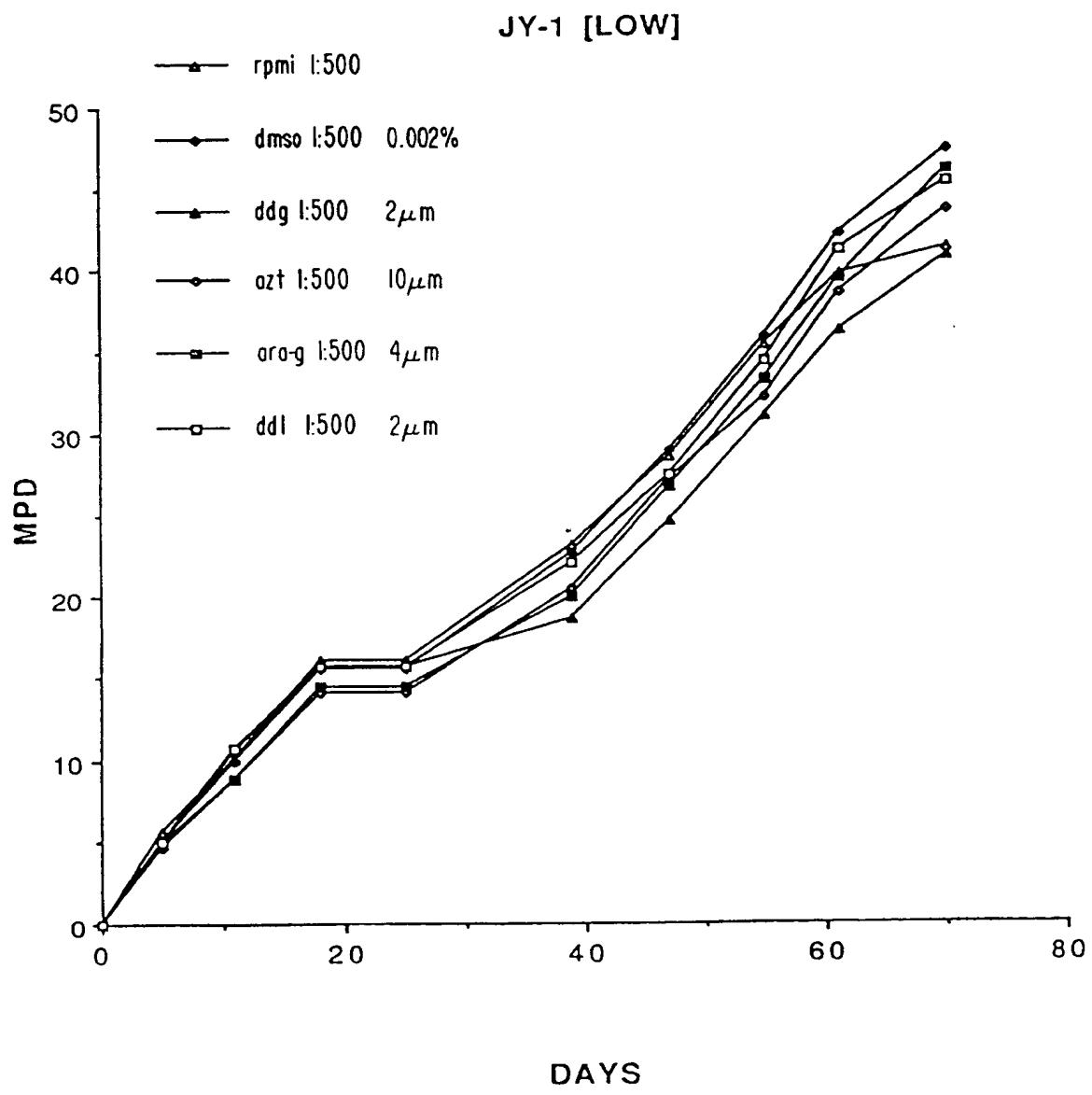
Fig. 21C

Fig. 21D

1            2            3            4            5            6



**Fig. 22**



**Fig. 23**

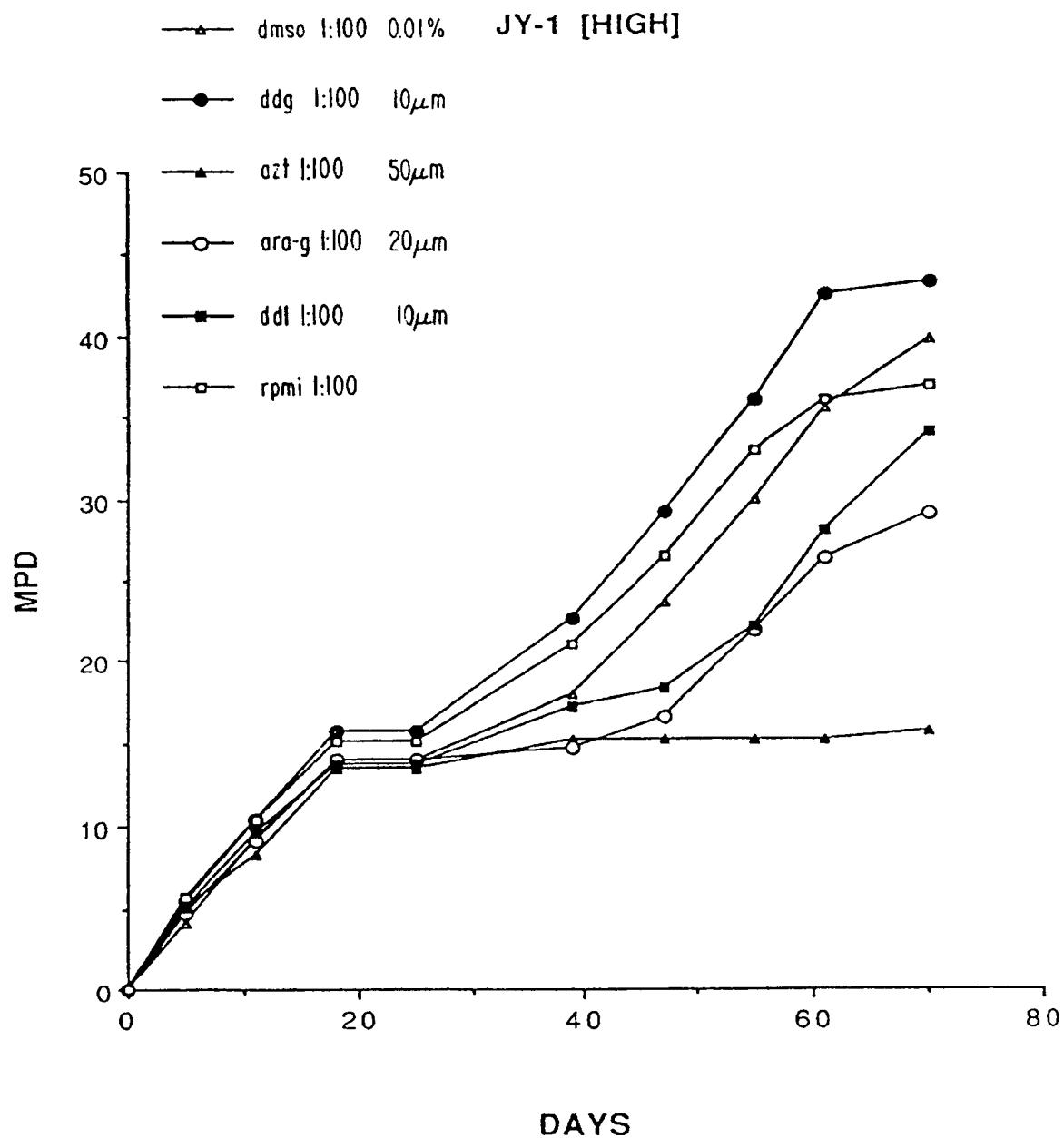
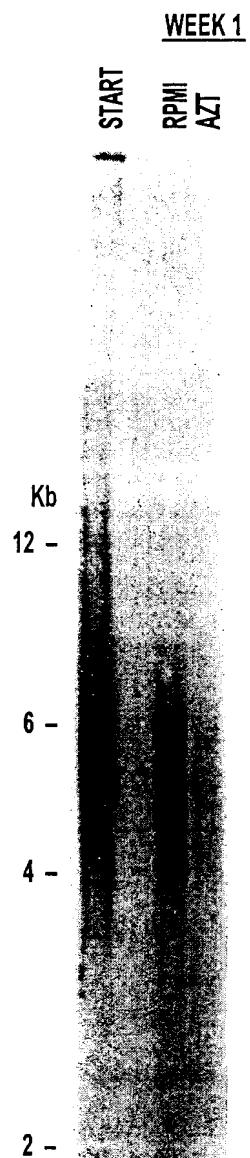
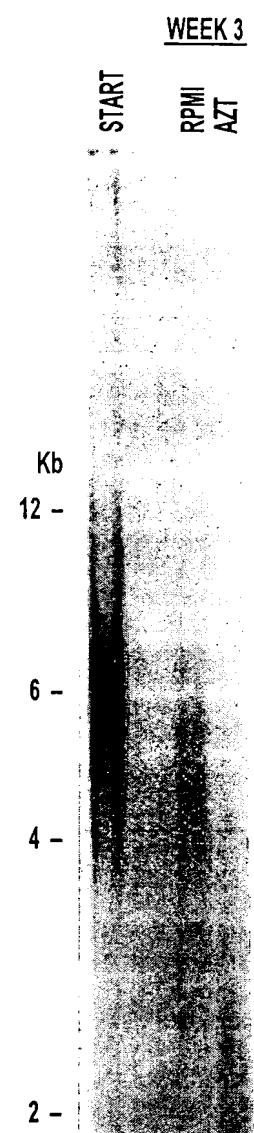


Fig. 24

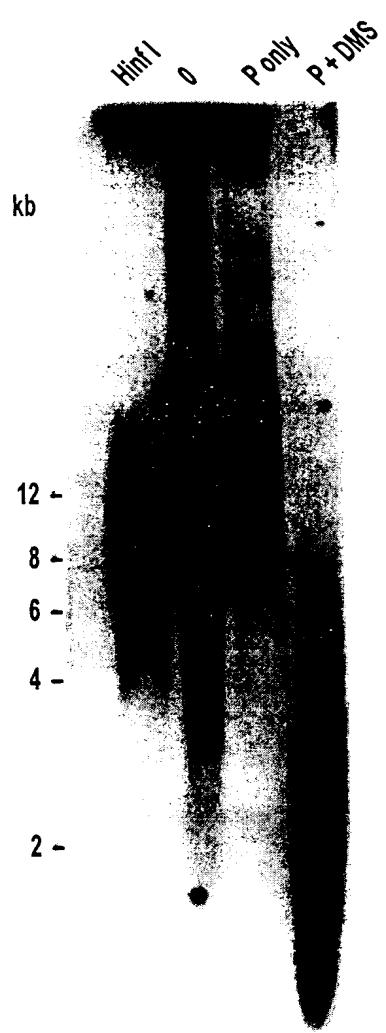


**Fig. 25A**



**Fig. 25B**

G-reaction:  
Measurement of  
Telomere Length



**Fig. 26**

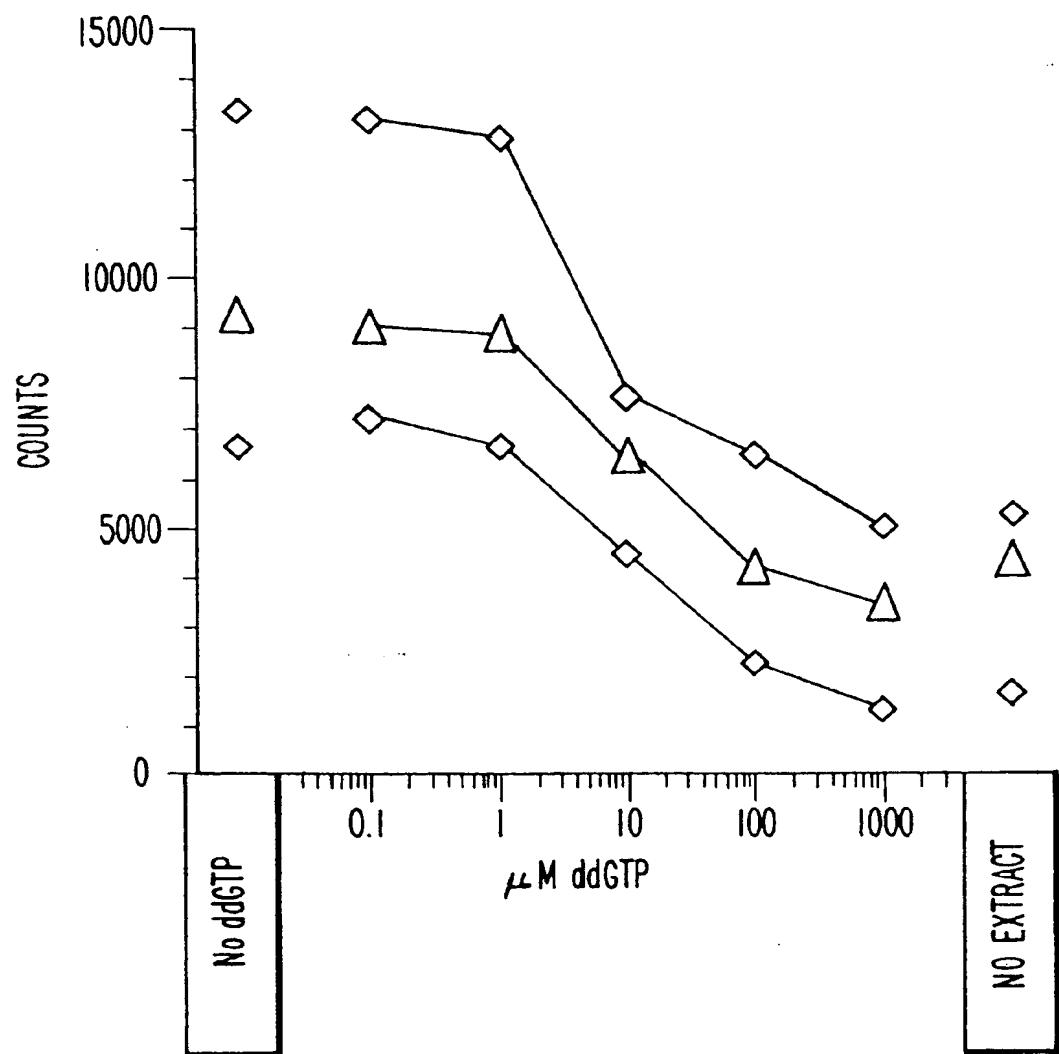


Fig. 27

*C. gui*. B-3163\*

*S. ser.* 674

*C. gui*. B-3176

*C. pse*. B-4212

*C. pse*. B-4296\*

*K. lac*. B-4298

*C. lus*. B-4303

*C. tro*. B-4415

*C. tro*. B-4416

*C. mal*. B-4430

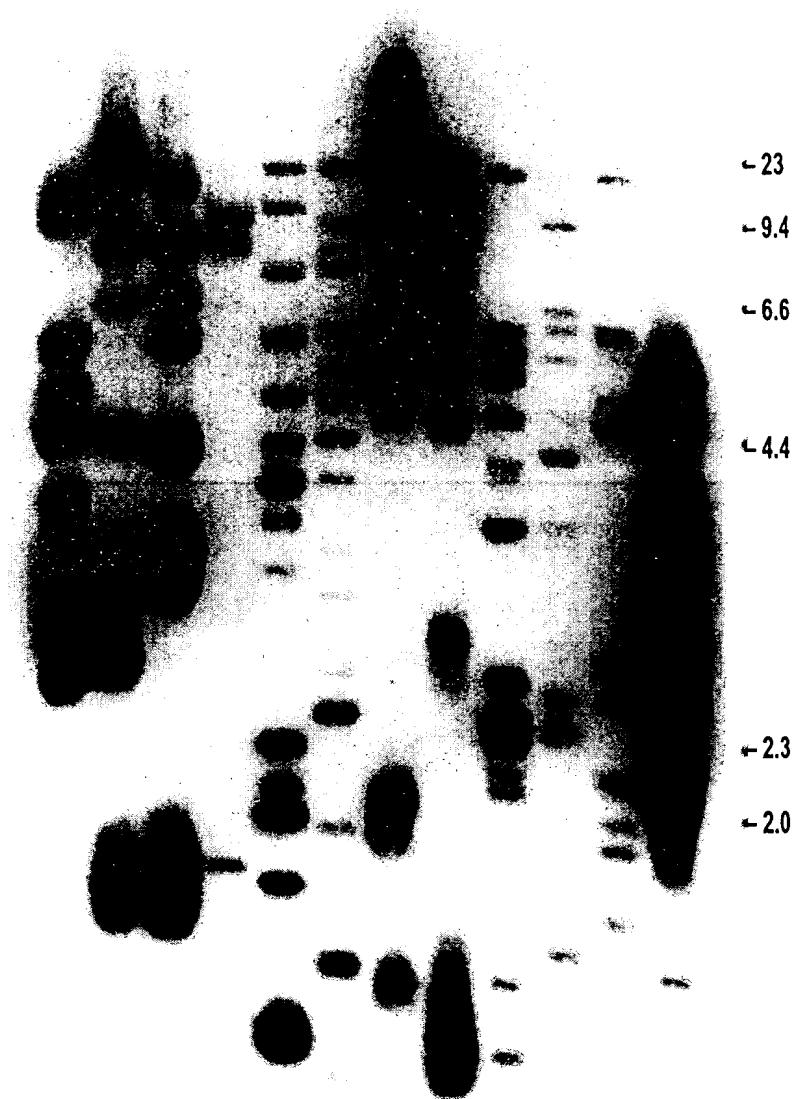
*C. mal*. B-4431\*

*C. tro*. B-4437

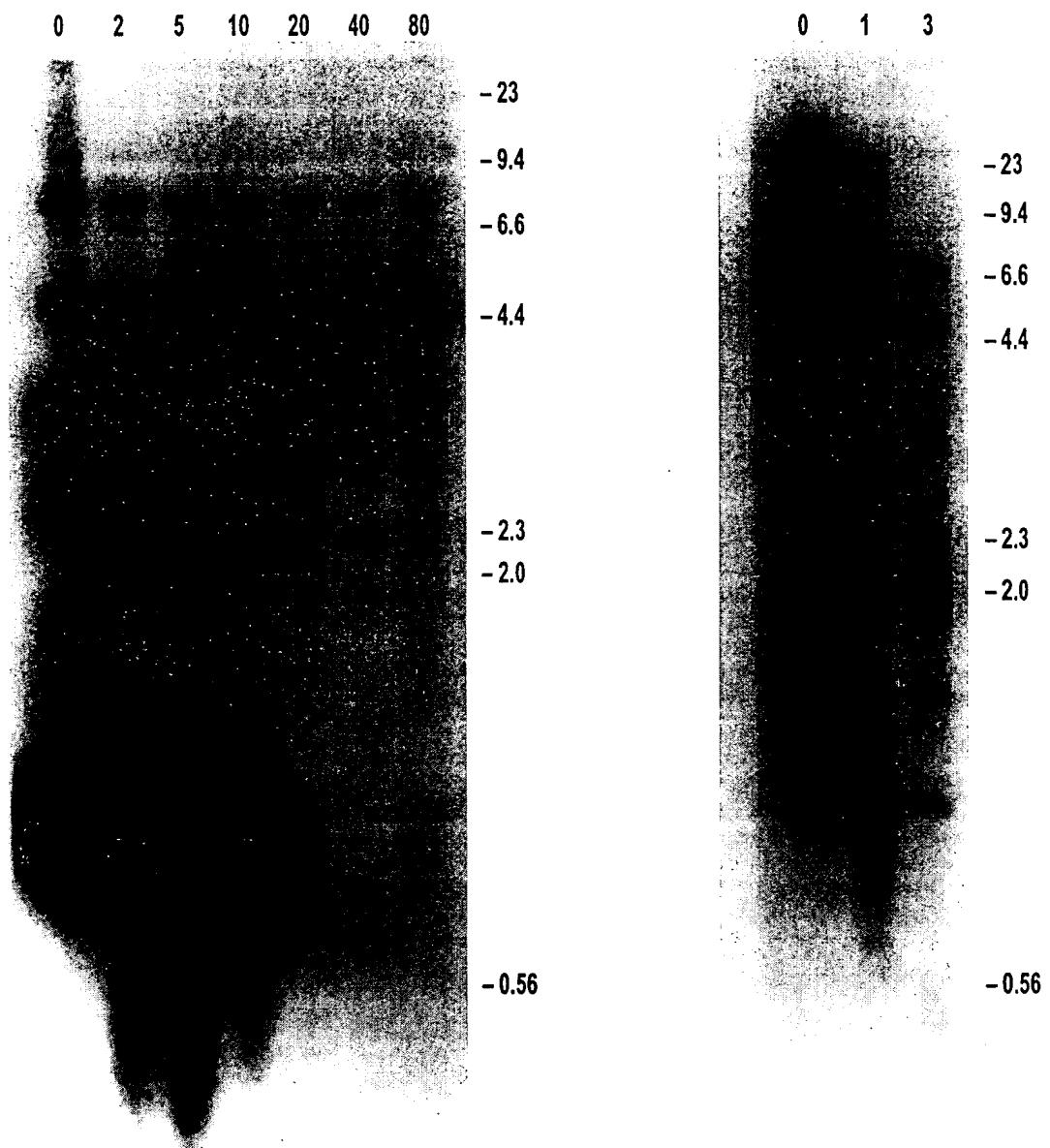
*C. tro*. B-4438

*C. tro*. B-4439

*C. alb*. B-WO-1



**Fig. 28**



**Fig. 29**

## Telomeric Repeat Species

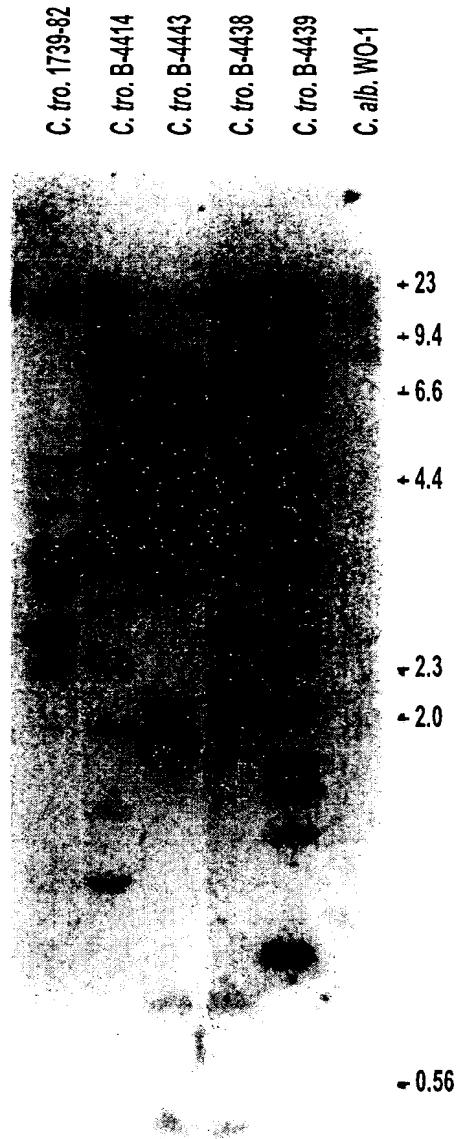
|                     |                                           |                         |
|---------------------|-------------------------------------------|-------------------------|
| <i>C. alb.</i>      | A C G G A T G T C T A A C                 | T T C T T G G T G T G T |
| <i>C. tro. 4414</i> | A G G A T G T C A C G A                   | T C A T T G G T G T G T |
| <i>C. tro. 4443</i> | A A G G A T G T C A C G A                 | T C A T T G G T G T G T |
| <i>C. mal.</i>      | A C G G A T G C A G A C T                 | C G C T T G G T G T G T |
| <i>C. gui.</i>      | A C                                       | T G G T G T G T G T G T |
| <i>C. pse.</i>      | A C G G A T T G A T T A G T T A T G T G T | G G T G T G T G T G T   |
| <i>K. lac.</i>      | A C G G A T T G A T T A G G T A T G T G T | T G G G G G T G T G T   |
| <i>C. gla.</i>      | C T G G G T G C                           | T(G)2-3(T G)1-6         |
| <i>S. cer.</i>      |                                           |                         |

3  
To End ↑  
5

Fig. 30



AC Probe



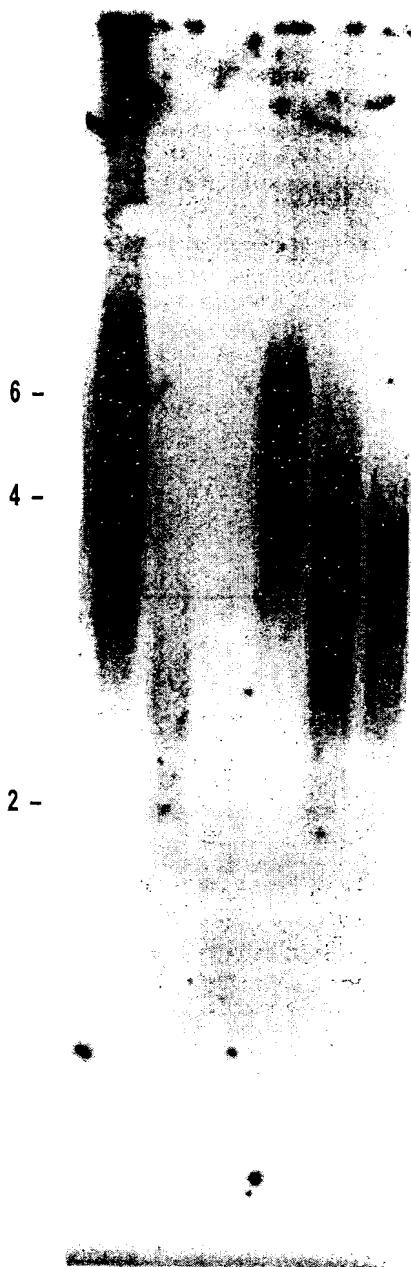
AA Probe

**Fig. 31**

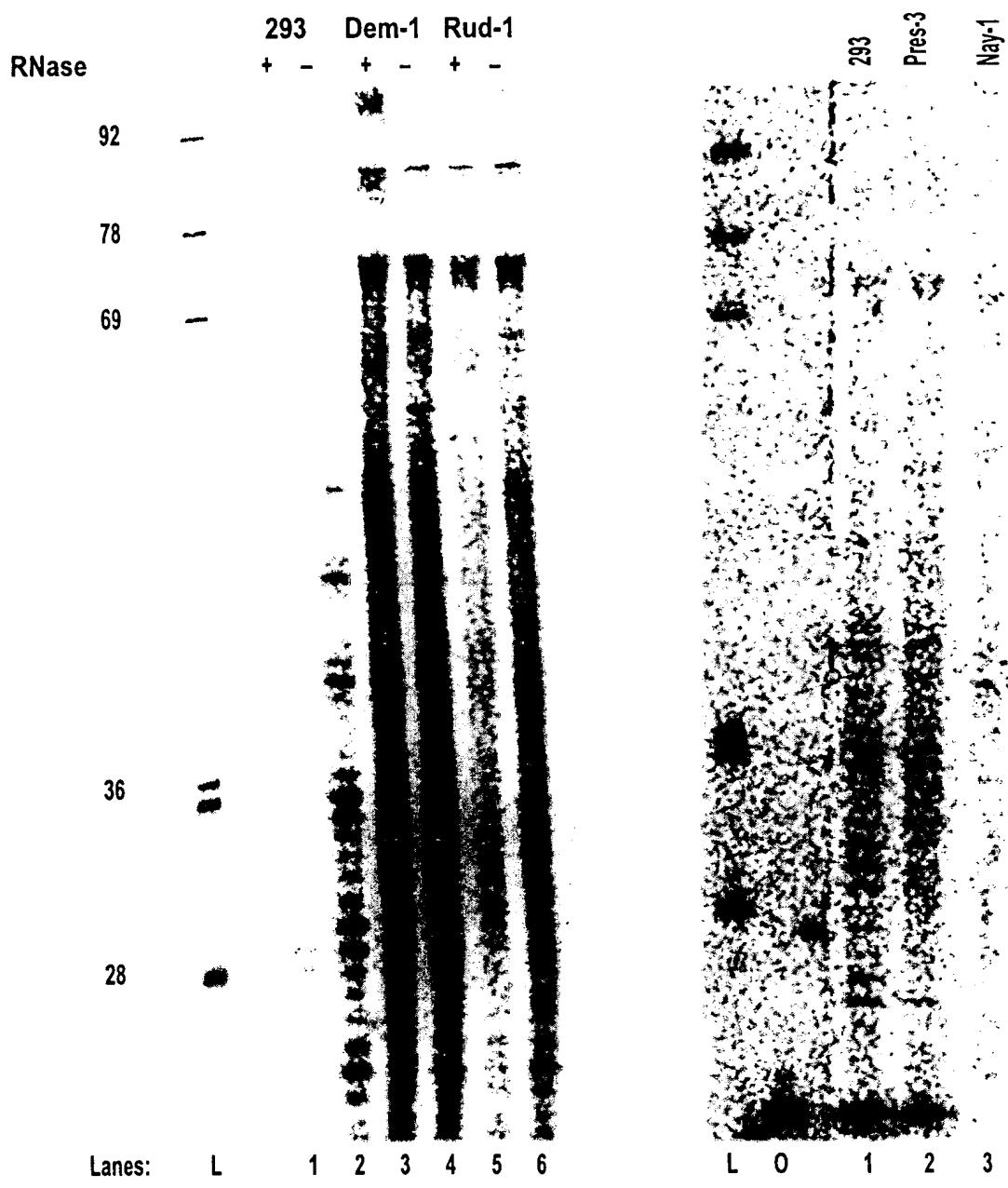
10 mM ddG  
+0.01% DMSO

0.01% DMSO  
CONTROL

WEEK      1    9    10    1    9    10



**Fig. 32**



**Fig. 33**